

PART Assessments in Support of General Goal 1 Nuclear Weapons Stewardship

Advanced Simulation and Computing (GG 1)	National Nuclear Security Administration (NNSA)		FY 2004 Appropriation: \$709,344,000	
Last Assessed in FY 2002 (in support of the FY 2004 President’s Budget)				
Overall Score: 87 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	83	100	91	85
Significant Findings:				
Overall, the program scores well because it has a clear purpose, is well managed, and has clear and measurable goals. Additional findings include:				
<ul style="list-style-type: none">For the most part, the program makes a unique contribution to this mission area and there does not appear to be any other viable alternative.ASCI has specific goals that guide the program and inform its progress. While some of the annual goals are somewhat vague, they contribute to the long-term goal of simulating the performance of nuclear weapons.A possible area of concern with the ASCI program is that the focus of the program not be diverted to other, non-weapons related work. Furthermore, the program should focus on using its resources to the maximum extent possible without developing redundancy in the three weapons laboratories.				

Facilities and Infrastructure (GG 1)	National Nuclear Security Administration (NNSA)	<i>FY 2004 Appropriation: \$234,773,000</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President's Budget)				
Overall Score: 78 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	100	90	67
Significant Findings:				
<ul style="list-style-type: none">The program has a specific purpose--to refurbish the aging nuclear weapons complex and reduce the backlog of maintenance that the Department deferred over the past decade. The Department has an adequate and detailed planning process that should enable it to achieve its goals of stabilizing (not increasing) the amount of deferred maintenance by 2005 and meeting the industry standard by 2009.The program has a Ten-Year Comprehensive Site Plan that integrates and prioritizes projects across the weapons complex. Using the priority list, the backlog of maintenance work will be reduced to a level comparable to that found in industry by 2009. It will also lower overall maintenance requirements by reducing the amount of unused building space in the complex by approximately 3 million square feet.The program appears to have strong program management at the headquarters level, with detailed involvement at the site level to ensure the proper allocation of funds.Given that the program is new (its first year of funding was 2001), it does not yet have an extensive record of results.Because the program is only two years old, and its results are not yet measurable, there may be some overlap between the FIRP program and other NNSA infrastructure related programs. For example, NNSA manages a separate budget line for facility readiness, and provides funding for new construction in its science campaigns budget lines. Both of these contribute to the overall condition of the weapons complex so it is an area that may require management attention in the future.				

Inertial Confinement Fusion Ignition and High Yield Campaign (GG 1)	National Nuclear Security Administration (NNSA)	<i>FY 2004 Appropriation: \$505,673,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 77 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	90	89	60
Significant Findings:				
<p>The assessment found that the program appears to be better managed than it was several years ago when cost increases and schedule delays in the construction of the National Ignition Facility (NIF) threatened to halt it. However, much remains to be accomplished which has considerable technical risk. Specific findings include:</p> <ul style="list-style-type: none">• Clear, succinct performance measures are difficult for the program office to articulate, and it is not clear that current performance measures are measurable.• Although numerous external evaluations have supported the need for the program, there are parts of the Department of Defense that rank ICF lower on the priority list than many other nuclear weapons-related programs.• NNSA has taken steps to correct deficiencies uncovered in 2000 that threatened to derail the program.				

Readiness in Technical Base and Facilities (RTBF), Operations (GG 1)	National Nuclear Security Administration (NNSA)	<i>FY 2004 Appropriation: \$1,260,317,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 75 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	100	88	56
Significant Findings:				
<p>The assessment found that the program has only recently developed long-term performance goals against which it can measure its success. Therefore, the program does not yet have a well established track record against which those goals can be assessed.</p>				
<p>Additional findings include:</p> <ul style="list-style-type: none">• The integration of RTBF and the Facilities Infrastructure Recapitalization Program is just beginning.• The extent to which contractors are held accountable for cost, schedule, and performance goals is unclear.• Improved efficiencies and demonstrated cost effectiveness from year to year was not readily apparent.• Independent evaluations of the program were decidedly mixed in their assessments, but trending towards showing improvements.				

Detailed PART Assessment Data

Safeguards and Security (GG 1)	National Nuclear Security Administration (NNSA)		FY 2004 Appropriation: \$572,754,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 59 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	50	86	42
Significant Findings:				
<ul style="list-style-type: none">The Department commits a significant amount of resources to secure the weapons complex, and it is arguably one of the most secure sets of facilities in the country.The program lacks clearly defined goals that can help the program achieve the greatest return on its investment and thus enhance the level of security. The "adequate" rating received by the program largely reflects this shortcoming and should not be interpreted to mean that security at the Nation's nuclear weapons complex is lax or insufficient.The program has a clear purpose which addresses a specific need "securing the Nation's nuclear weapons complex" and thus scored well in the Purpose Category. The design of the program is still evolving and the Department recognizes the need to clearly articulate changes to the existing structure as they are determined.The program does not have strong linkages between performance goals and quantifiable outcomes. For example, the goals of the program are: (1) to "provide a cost effective security program"; (2) to "demonstrate protection against a specific threat"; and (3) to "develop new technologies." These goals are not quantifiable or measurable and it is therefore difficult to quantify the value of additional spending going towards this effort. One may argue that the results section should be higher because there have been no security breaches and a comprehensive, in-depth security posture is in place and operating effectively. However, with improved measures of effectiveness and direct links between goals and outcomes, the safeguards and security program can better assure maximum program effectiveness and efficiency. (The program received an "adequate" rating rather than a "results not demonstrated" rating because NNSA leadership is aware of this shortcoming and is actively working on new measures.)				

**PART Assessments in Support of General Goal 2
Nuclear Nonproliferation**

Elimination of Weapons-Grade Plutonium Production (GG 2)	National Nuclear Security Administration (SC)	<i>FY 2004 Appropriation: \$62,776,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 41 (Results Not Demonstrated)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	89	100	0
Significant Findings:				
The assessment found that:				
<ul style="list-style-type: none">EWGPP is a new program for the National Nuclear Security Administration (the transfer of the program from the Department of Defense was only completed in FY 2003) and so it has not developed a track record of results that would justify any rating more than “results not demonstrated.”The program has developed solid, tangible performance measures against which it can measure itself.				

International Nuclear Materials Protection and Cooperation (GG 2)	National Nuclear Security Administration (SC)	<i>FY 2004 Appropriation: \$249,509,000</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President’s Budget)				
Overall Score: 85 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	100	57	87
Significant Findings:				
<p>This program has a clear purpose that addresses a specific need. Furthermore, the vitality of this work is apparent in the post September 11 environment and the knowledge that terrorists are seeking to obtain weapons of mass destruction. The Department has established specific, measurable goals and timeframes. In addition to the long-term performance goals, the Department tracks specific annual performance goals to measure year to year progress. The program scored less well on management primarily because the Department's ability to track expenditures by country on a timely basis needs improvement and because the Department is slow to spend annual funding. Historically, the program has carried forward a large amount of funding from one year to the next. However, this slow spending is largely the result of difficulties negotiating access agreements with Russia (DoD's Cooperative Threat Reduction Programs suffers from the same problem). Because the Department has achieved measurable results, it scored well on the results section. For example, by 2002, the Department secured 40 percent of nuclear weapons and weapons usable material at numerous Russian Navy sites.</p> <p>The Department needs to improve the way it tracks expenditures by country so that it can better manage its allocation of resources.</p>				

PART Assessments in Support of General Goal 4 Energy Security

Distributed Energy Resources (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		FY 2004 Appropriation: \$67,564,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 73 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	80	100	59
Significant Findings:				
<p>The assessment found that the program generally has strong management and planning, and was largely rated positively in its most recent peer review (2002). Additional findings include:</p> <ul style="list-style-type: none">• The program focuses on developing highly efficient “package” systems by researching the best ways to integrate heating and power systems. The program also develops decision and design tools to help specific industries quantify costs and benefits of installing distributed energy technologies.• The program has recently developed several good performance measures that cover most of the program’s technical activities, and appears to have performed well against its targets.• Some of the program’s work on component technologies appears to be within the capability of industry.• The program also conducts education and other outreach activities to support development of better environmental siting and permitting regulations, more effective building codes and standards, and more open and competitive utility markets. Performance measures for outreach activities are still under development.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Geothermal Energy (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		<i>FY 2004 Appropriation: \$26,800,000</i>	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 71 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	80	88	59
Significant Findings:				
<p>The program has a very clear purpose and strong planning and management. Additional findings include:</p> <ul style="list-style-type: none">• In 2000, the National Research Council (NRC) reported that the program has contributed to the development of advanced drilling technologies that have lowered costs and opened up a larger fraction of the U.S. geothermal resources base for competitive power production.• The program has implemented the NRC recommendation to shift focus from near-term technologies to enhanced geothermal systems, which are engineered reservoirs created to extract heat from economically unproductive geothermal resources.• The program’s 2002 peer review generally reported positively on the technical progress of most projects.• The program has made progress in further refining its long-term and annual performance measures, including measures for its outreach activities.				

Detailed PART Assessment Data

- Each year, the Congress earmarks a portion of program funds for activities that do not contribute to the program's goals.
- This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.

Hydrogen/Fuel Cell (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		FY 2004 Appropriation: \$158,318,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget) as “Hydrogen Technology”				
Overall Score: 73 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	80	100	59
Significant Findings:				
The program has a very clear purpose and strong planning and management. Additional findings include:				
<ul style="list-style-type: none">• The program has coordinated well with other DOE programs and with industry in establishing a plan to achieve the goal of President’s Hydrogen Fuel Initiative, which is focused on developing commercially viable hydrogen fuel and vehicle technologies by 2015.• In 2000, the National Research Council (NRC) reported that the program “has established a firm technical foothold in the critical technical areas” of hydrogen production and storage. The program’s 2003 Merit Review and Peer Evaluation generally reported positively on the technical progress of most projects.• The NRC indicated that the program should concentrate its hydrogen production research on production from renewable energy resources.• Each year, the Congress earmarks a portion of program funds for activities that do not contribute to the program’s goals. Earmarks in 2004 consumed nearly half of the program’s budget, jeopardizing progress on the Initiative.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Solar Energy (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		FY 2004 Appropriation: \$87,617,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 73 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	80	100	59
Significant Findings:				
The program has a very clear purpose and strong planning and management. Additional findings include:				
<ul style="list-style-type: none">• The program has implemented a new “systems-driven” approach to help prioritize activities in its portfolio by analyzing present and potential markets, technology trade-off studies, and research and development (R&D) reviews.• The program also drafted a multi-year technical plan to guide its research efforts.• The program has made progress in further refining its long-term and annual performance measures.• Each year, the Congress earmarks a portion of program funds for activities that do not contribute to the program’s goals.• In 2000, the National Research Council (NRC) reported that the program’s photovoltaic activity has largely been successful, while the Concentrating Solar Power (CSP) systems activity has not. The 2003 and 2004 Budgets phased out the CSP activity.• In 2003, a third-party technical report (funded by the Department, but reviewed by NRC) of two CSP technologies indicated that the technologies may approach cost competitiveness by 2020, although this potential is largely dependent on significant incentives to increase deployment.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Weatherization Assistance (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)	<i>FY 2004 Appropriation: \$251,517,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 82 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	88	78	75
Significant Findings:				
<p>The program has a very clear purpose, has strong planning and management, and generally weatherizes the number of homes it commits to weatherize each year. Additional findings include:</p> <ul style="list-style-type: none">Based on analyses by the Oak Ridge National Lab, the program has maintained a favorable (greater than one) benefit-cost ratio.The program appears to coordinate well with the Department of Health and Human Services, and coordination with the Department of Housing and Urban Development on lead paint issues appears to be improving.The program does not conduct a periodic independent analysis of its cost effectiveness, and does not require States to report on cost effectiveness, largely due to the cost of such evaluations. However, the program is planning for an evaluation in response to this finding in last year’s assessment.				

Detailed PART Assessment Data

- In 2003, the Department's Inspector General (IG) found that some local agencies inappropriately charged administrative expenses as operating costs. In effect, the agencies understated total administrative costs, which have statutory limits.
- The IG also found that some States combined the results of weatherization efforts funded by the Low Income Home Energy Assistance Program (LIHEAP) with those completed with Department funds, which may distort upwardly the program's benefit-cost ratio.

Wind Energy (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		FY 2004 Appropriation: \$43,402,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 75 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	80	88	67
Significant Findings:				
The program has a very clear purpose and strong planning and management. Additional findings include:				
<ul style="list-style-type: none">• In 2000, the National Research Council (NRC) reported that “the Wind Energy program, combined with temporary substantial federal and state renewable energy subsidies, have been responsible for the U.S. lead in technology development.”• The growing commercial success of wind energy systems in high wind-speed areas (15 mph or more) obviates the need for further Federal support of wind turbine R&D in these areas. Beginning in 2003, the program shifted its focus to low wind-speed areas.• The program has made progress in further refining its long-term and annual performance measures.• Each year, Congress earmarks a portion of program funds for activities that do not contribute to the program’s goals.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Zero Energy Buildings/ Building Technologies (GG 4)	Office of Energy Efficiency and Renewable Energy (EERE)		<i>FY 2004 Appropriation: \$66,283,000</i>	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget) as “Building Technologies”				
Overall Score: 59 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	50	88	42
Significant Findings:				
The assessment found that the program generally has a clear (but broad) purpose. Additional findings include:				
<ul style="list-style-type: none">• The program has successfully “graduated” some energy efficient technologies to the private sector for commercialization. A National Research Council assessment of four (among hundreds) of the program’s R&D activities found that three have produced positive returns to the public on the Federal investment.• The program has consolidated activities on development of building designs, formerly funded through two different appropriations, by eliminating funding from the Energy and Water appropriation, which was heavily earmarked.• The program has recently developed long-term performance measures for its research activities, but has not yet developed corresponding annual measures.• The program appears to have a good prioritization process for development of energy efficiency standards for building equipment and appliances.• The program is now focusing its “Emerging Technology R&D” activity on longer-term, higher-risk activities, such as solid state lighting.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Detailed PART Assessment Data

Electric Transmission and Distribution (GG 4)	Office of Electric Transmission and Distribution (OETD)	<i>FY 2004 Appropriation: \$80,818,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget) as “High Temperature Superconducting R&D”				
Overall Score: 70 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	80	70	88	59
Significant Findings:				
<p>The assessment found that the program is relatively well designed, planned and managed, but hasn’t articulated how benefits and other factors such as risk and cost are used in funding decisions. Additional findings include:</p> <ul style="list-style-type: none">• The program and individual projects are evaluated by annual independent peer review which helps to ensure that the over all program remains relevant and that progress is being made at the program and project level.• The program lacks an efficiency/cost-effectiveness measure.• This program and other applied R & D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.• Detailed annual power (megawatt), voltage (kilavolt), and in the case of cable, meters, metrics exist for each equipment type.				

Develop New Nuclear Technology (GG 4)	Office of Nuclear Energy, Research and Technology (NE)	<i>FY 2004 Appropriation: \$139,248,000</i>
Last Assessed in FY 2003 (in support of the FY 2005 President's Budget) through multiple PARTs (below)		

Advanced Fuel Cycle Initiative				
Overall Score: 76 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	90	100	53
Significant Findings: The assessment found that the program has a strong purpose and design based upon extensive government, industry, academia, and international collaboration. Additional findings include: <ul style="list-style-type: none"> • The program has established a detailed program plan with measurable annual performance targets based upon its need to provide a comprehensive basis for a Secretarial decision on the technical need for a second repository as early as 2007. • The program is coordinated with other DOE nuclear energy and waste management programs, including the Generation IV Nuclear Energy Systems Initiative, and the Civilian Radioactive Waste Management Programs. • Although there has been regular oversight and assessment by the Nuclear energy Research Advisory Committee (NERAC), a formal evaluation process, including international programs with similar goals, has not been established. 				

Generation IV Nuclear Energy Systems Initiative				
Overall Score: 79 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	90	100	60
Significant Findings: The assessment found that the Gen IV program had a strong overall design based upon a comprehensive technology roadmap developed by an international team of experts from many different countries and international organizations, the Generation IV International Forum. Additional findings include: <ul style="list-style-type: none"> • To evaluate sustainability, proliferation resistance and security, safety and reliability, and economics with confidence requires a well-developed preconceptual or conceptual design. • Efforts are underway to refine performance measures as preconceptual designs are completed. • A comprehensive program evaluation is planned for February 2004. 				

Nuclear Power 2010				
Overall Score: 69 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	89	88	45
Significant Findings: <ul style="list-style-type: none"> • The program purpose is clear and the program has prepared a plan of action that has been reviewed by DOE's Nuclear Energy Research Advisory Committee (NERAC). • The program's near-term new plant deployment goals are consistent with the National Energy Policy report. • The program has established annual performance goals to assess achieving its long-term objective, and detailed performance measures. • DOE's NP2010 program plan, which includes the use of competitive, peer reviewed project awards and a performance-based personnel appraisal system, will provide information needed to manage the program 				

Bonneville Power Administration (GG 4)	Power Marketing Administrations (PMA)	<i>FY 2004 Appropriation: N/A</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President's Budget)				
Overall Score: 77 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	89	100	73
Significant Findings:				
<p>The program assessment demonstrates that Bonneville plans and carries out its programs effectively, meeting national standards for providing dependable power to the four Pacific Northwest states while also balancing power and environmental requirements. Additional findings include:</p> <ul style="list-style-type: none">• It conducts annual financial audits and extensive program and management reviews for power generation and its transmission and natural resources programs. Bonneville's high score is based on the planning and management of its programs and the reliable delivery of power.• Bonneville's score is reduced because the program does not make a unique contribution to addressing a problem in the industry, and its power allocations, by law made on a preference basis to a special class of customers, are not optimally designed. Developing power rates and customer allocations under its legal requirements often takes years and is an inefficient (it does not offer power to bidders) and burdensome process. In addition, according to the General Accounting Office (GAO), Bonneville historically has not covered all its costs.• Bonneville competes with the private sector, particularly in its surplus power sales to California.• Bonneville also has not developed adequate long and short term performance targets and measures, particularly efficiency measures.				

Southeastern Power Administration (GG 4)	Power Marketing Administrations (PMA)	<i>FY 2004 Appropriation: \$5,070,000</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President's Budget)				
Overall Score: 73 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	71	86	73
Significant Findings:				
<p>The program assessment shows that Southeastern largely fulfills its authorized purpose, but the function it performs is not unique in the industry, and the program, though largely in accordance with the law, is not optimally designed -- its power sales activities are inefficient (power is not sold in a bidder's market) and administratively burdensome (rate changes sometimes take years to initiate and implement). Additional findings include:</p> <ul style="list-style-type: none">• Southeastern plans its activities effectively to ensure that power is provided dependably and meets national standards for quality of service that apply to all utilities. These elements, in concert with its management and execution of operations, earn this activity a high score.• The program conducts annual financial audits and managerial reviews and budgets its full annual costs except for a portion of its debt service that the General Accounting Office (GAO) indicates is not recovered.• Southeastern lacks adequate long and short term measures and targets, particularly efficiency measures.				

Southwestern Power Administration (GG 4)	Power Marketing Administrations (PMA)	<i>FY 2004 Appropriation: \$28,431,000</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President's Budget)				
Overall Score: 73 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	77	90	70
Significant Findings:				
<p>The program assessment rating shows that Southwestern is effective in planning and managing its program. The program also meets national standards applied to all utilities across the country that measure generation and transmission efficiency, reliability and quality of service. Additional findings include:</p> <ul style="list-style-type: none">• Southwestern contracts for annual financial audits and conducts periodic managerial reviews.• Transmission line construction projects are adequately planned and reviewed. This element, and the previous two, give this activity a high score.• Southwestern's rating is reduced because the program makes no unique contribution to addressing a problem in the industry and it competes with other suppliers by buying power in the market to substitute for hydrogeneration when that product is unavailable because of drought or other conditions.• The marketing program, though largely in accordance with the law, is not optimally designed. Power sales contracts rely on a time consuming preference system that allocates power to special customers (rather than offering power to bidders) and is administratively burdensome (allocations sometimes take years to develop). In addition, according to the General Accounting Office (GAO), Southwestern, historically, has not recovered all its costs.• Southwestern has inadequate long and short term goals, measures and targets, particularly efficiency measures.				

Western Area Power Administration (GG 4)	Power Marketing Administrations (PMA)	<i>FY 2004 Appropriation: \$157,525,000</i>		
Last Assessed in FY 2002 (in support of the FY 2004 President’s Budget)				
Overall Score: 77 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	78	91	78
Significant Findings:				
<p>The assessment found that Western is effective in planning and managing its activities. It meets national standards for providing dependable power. Additional findings include:</p> <ul style="list-style-type: none">• Western conducts annual financial audits and management reviews to ensure that its activities are conducted according to sound financial and accounting standards.• Its system for reviewing and adopting construction projects is rigorous.• Western's role in marketing power makes no unique contribution to solving a problem in the industry and the program, though largely in accordance with the law, is not optimally designed. The process of allocating power sales on preference basis to special customers (rather than to bidders) is time consuming and administratively burdensome (allocations sometimes take years to develop and adjust). Also, according to the General Accounting Office (GAO), Western does not recover all its costs.• Western competes with private industry by purchasing unneeded power to resell.• Western lacks adequate statements of long and short term goals, targets and measures.				

Natural Gas Technologies (GG 4)	Office of Fossil Energy (FE)		FY 2004 Appropriation: \$57,395,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 44 (Ineffective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	40	60	88	25
Significant Findings:				
<ul style="list-style-type: none">Many of the program’s efforts are not unique, since private industry undertakes similar research.Actual additional production attributable to the program has been relatively small. Moreover, as noted by the National Academy of Sciences: “It is difficult to separate the contributions made by DOE and contributions made by industry and others.”While annual performance measures have been agreed to, modeling assumptions need to be made transparent.The program lacks a rigorous peer review process.This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Oil Technologies (GG 4)	Office of Fossil Energy (FE)		<i>FY 2004 Appropriation: \$46,827,000</i>	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 48 (Ineffective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	60	88	25
Significant Findings:				
<ul style="list-style-type: none">• The purpose of the program is well-defined.• Actual additional production attributable to the program has been relatively small. Moreover as noted by the National Academy of Science: “It is difficult to separate the contributions made by DOE and contributions made by industry and others.”• While annual performance measures have been agreed to, modeling assumptions need to be made transparent.• The program lacks a rigorous peer review process.• This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions.				

Petroleum Reserves (GG 4)	Office of Fossil Energy (FE)		FY 2004 Appropriation: \$229,882,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget) as “Strategic Petroleum Reserve”				
Overall Score: 92 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	88	100	87
Significant Findings:				
The assessment found that the program is strong over-all and that: <ul style="list-style-type: none">• The program has a clear purpose and is well designed. Some analysts suggest that the program would be more efficient if it made oil acquisition decisions based on market conditions. This would ease pressure on the market, and allow more oil to be delivered when prices were lower.• The program is strongly committed to performance measurement and tracking, and demonstrates results.• The program needs to continue to improve explicitly linking budget requests to performance goals.• The trend of the annual efficiency measure over years provides more meaningful performance information than year-to-year changes. The measure may be misleading when viewed on a year-to-year basis due to onetime increases or decreases in capital costs.				

Zero Emissions Coal-Based Electricity and Hydrogen Production (GG 4)	Office of Fossil Energy (FE)	<i>FY 2004 Appropriation: \$470,549,000</i>
Last Assessed in FY 2003 (in support of the FY 2005 President's Budget) as multiple PARTs (below)		

Clean Coal Research Initiative				
Overall Score: 54 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	67	75	40
Significant Findings: <ul style="list-style-type: none"> • These programs have a clear purpose and have demonstrated the ability to articulate potential public benefits. • Too high a proportion of funding has been directed at lower-priority activities (commercial-scale demonstrations) which should primarily be the responsibility of the private sector. • Annual performance measures have been agreed upon. • This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions. 				

Fuel Cells (Stationary)				
Overall Score: 61 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	60	67	75	40
Significant Findings: <p>The assessment found that the program is relatively well designed, planned and managed reflecting changes made in response to external reviews. The program has been recently revamped to establish new long-term outcome-oriented measures; implement a new strategic approach that focuses on commercialization through use of competitive research teams; and establish specific management tracking systems. Additional findings include:</p> <ul style="list-style-type: none"> • Specific annual performance measures tied to long term goals have been established. • This program and other applied R&D programs at the Department need to improve consistency in methodology and assumptions in estimating potential benefits to facilitate meaningful analyses that can help inform budget decisions. • Some programs have reached completion (e.g., molten carbonate fuel cell demonstration and tubular solid oxide fuel cells). 				

**PART Assessments in Support of General Goal 5
World-Class Scientific Research Capacity**

Advanced Scientific Computing Research (GG 5)	Office of Science (SC)	<i>FY 2004 Appropriation: \$218,533,000</i>		
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 84 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	70	67	87
Significant Findings:				
The assessment found that the ASCR program has developed a limited number of adequate performance measures and is in the process of drafting a long-term strategic vision, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">• The program has demonstrated an improved level of interagency communication and cooperation.• The program recently instituted a Committee of Visitors process, but the program’s merit review processes have yet to be validated—for impact on quality, relevance, and performance of the research portfolio—since the assessment(s) have not been completed.• The program’s advisory committee is underutilized relative to other Office of Science advisory committees.• The user facilities supported by the program are considered to be world-class, and a major interdisciplinary				

Basic Energy Sciences (GG 5)	Office of Science (SC)		FY 2004 Appropriation: \$1,091,725,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 93 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	80	92	93
Significant Findings:				
The assessment found that the BES program has developed a limited number of adequate performance measures, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">• The program is strategically driven and well managed.• Outside expert panels have validated the program’s merit-based review processes for awarding contracts and grants, resulting in a sponsored research portfolio that is generally considered to be relevant and of very high quality.• The experimental end stations at one the program’s main facilities have been underutilized at times, and there was a general lack of performance reporting on the actual use of all of the program’s synchrotron light source facilities.• The program does not include its long term research goals in grant solicitations, does not use strict quality control on performance data filed by laboratory contractors, and does not make annual aggregated grantee performance data available to the public in a transparent and meaningful manner.				

Biological and Environmental Research (GG 5)	Office of Science (SC)		<i>FY 2004 Appropriation: \$692,952,000</i>	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 86 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	89	67	87
Significant Findings:				
The assessment found that the BER program has developed a limited number of adequate performance measures, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">• The program uses targeted grant solicitations that convey the long-term goals of the program, and funds high-risk research that regularly delivers important results in areas such as genomics.• The program regularly coordinates its activities with other federal research agencies.• The program recently instituted a Committee of Visitors process, but the programs merit review processes have yet to be validated—for impact on quality, relevance, and performance of the research portfolio—since the assessment(s) have not been completed.				

Fusion Energy Science (GG 5)	Office of Science (SC)		FY 2004 Appropriation: \$280,393,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 82 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	90	67	80
Significant Findings:				
The assessment found that the FES program has developed a limited number of adequate performance measures, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">• The program budget is not yet sufficiently aligned with scientific program goals so that the impacts of funding changes on performance are readily known.• The program has not yet produced a science-based strategic plan for the future of U.S. fusion research within the new international context for fusion.• The program recently instituted a Committee of Visitors process, but the program’s merit review processes have yet to be validated—for impact on quality, relevance, and performance of the research portfolio—since the assessment(s) have not been completed.• Due in part to design problems and inadequate oversight, one of the program’s scientific user facilities, the National Spherical Torus Experiment, experienced a magnetic coil failure in February, 2003, so it only operated for 4 weeks in 2003.				

High Energy Physics (GG 5)	Office of Science (SC)		FY 2004 Appropriation: \$792,530,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 84 (Moderately Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	70	67	87
Significant Findings:				
The assessment found that the HEP program has developed a limited number of adequate performance measures, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">There is cautious optimism that the program’s largest facility (the Tevatron at Fermilab) may finally be emerging from its recent period of performing below expectations.The program recently instituted a Committee of Visitors process, but the program’s merit review processes have yet to be validated—for impact on quality, relevance, and performance of the research portfolio—since the assessment(s) have not been completed.The program’s advisory committee delineated priorities amongst several new projects, but has yet to set priorities across the breadth of the program.				

Nuclear Physics (GG 5)	Office of Science (SC)		FY 2004 Appropriation: \$490,903,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 85 (Effective)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	80	67	87
Significant Findings:				
The assessment found that the NP program has developed a limited number of adequate performance measures, as recommended during the 2004 PART process.				
Additional findings include:				
<ul style="list-style-type: none">• The program’s management is excellent. The program produces a relatively transparent budget justification, and engages its advisory committee in a manner that produces fiscally responsible advice.• The program recently instituted a Committee of Visitors process, but the program’s merit review processes have yet to be validated—for impact on quality, relevance, and performance of the research portfolio—since the assessment(s) have not been completed.• The program has already engaged its advisory committee in developing research milestones against which future outside panels may judge interim progress toward achieving the long-term goals of the program.• The program does not include its long term research goals in grant solicitations, does not use strict quality control on performance data filed by laboratory contractors, and does not make annual aggregated grantee performance data available to the public in a transparent and meaningful manner.				

PART Assessments in Support of General Goal 6 Environmental Management

Environmental Management	Off. of Environmental Mgt. (EM)		FY 2004 Appropriation: \$7,007,585,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget)				
Overall Score: 61 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	80	100	26
Significant Findings:				
The assessment found that managers are implementing reforms that are improving program performance, including re-competing and renegotiating cleanup contracts to include performance incentives and reorganizing operations to focus on on-the-ground risk reduction. The program’s rating improved from ineffective to adequate.				
Additional findings include:				
<ul style="list-style-type: none">• The EM program has been redesigned to focus on its cleanup mission.• The program has aggressive long-term risk reduction, cost, and schedule goals.• The program needs to develop annual cost and schedule performance measures.				

PART Assessments in Support of General Goal 7 Nuclear Waste

Nuclear Waste Disposal (GG 7)	Office of Civilian Radioactive Waste Management (RW)		FY 2004 Appropriation: \$604,497,000	
Last Assessed in FY 2003 (in support of the FY 2005 President’s Budget) as “Yucca Mountain Project”				
Overall Score: 50 (Adequate)	I. Program Purpose (20%)	II. Strategic Planning (10%)	III. Program Mgt. (20%)	IV. Program Results (50%)
	100	67	75	17
Significant Findings:				
<p>Now that Yucca Mountain, Nevada, has been selected as the site of the Nation’s first nuclear waste repository, the program is changing its emphasis from scientific and technical studies to design, licensing by the Nuclear Regulatory Commission, and construction of the repository. Significant increases in annual appropriations will be needed to achieve the program’s goal of a working repository by the 2010. Reflecting the early stages of the program’s transition, the assessment found that the program is strong in terms of overall purpose and design but weaker in terms of strategic planning, program management, and results.</p>				
<p>More specifically, the assessment found that:</p> <ul style="list-style-type: none">• The project does not yet have an adequate performance baseline.• The project’s Earned Value Management System is not yet certified.• The project’s Capital Asset Management Plan, including its acquisition strategy, is incomplete.				